GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)
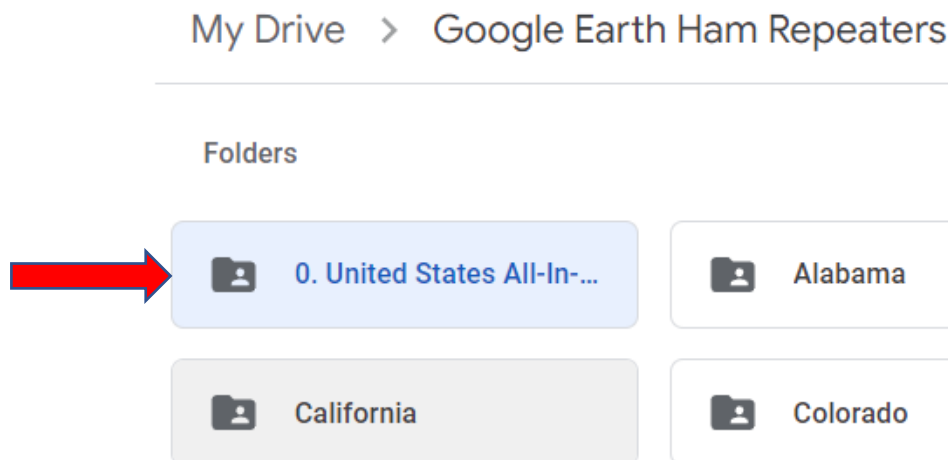
Hello Fellow Ham Radio Enthusiasts glad you made it to this shared folder location. My name is Ryan, Callsign AE0TO, hailing from Missouri. Being a newly minted Licensed Ham Operator, I have a lot to learn in the Ham World. However, being an Arkansas Hillbilly blessed with 23+ career in the U.S. Air Force, I am very readiness minded. Having utilized Google Earth extensively for wide-ranging applications ranging from everyday operational security planning to sensitive wartime missions it is one of the most useful tools to graphically represent situational awareness in a 3-Dimensional platform. Bottom line, it is a wonderful geospatial tool to aggregate data into a reasonably intuitive package providing a unique bird's eye sight-picture. I will go a little more into my rationale for this project later if you care to read it. Everyone is busy these days, so I will get right to it.

DISCLAIMER: If you can figure out Ham Radio, this should be a cake walk! The data provided is pulled directly from RepeaterBook.com (DIY Instructions Towards the End of Document). These are directly downloaded Keyhole Markup Language (KML) Files, from the website. The data contained therein is maintained by their team. I have simply aggregated these files into a comprehensive collection to be download for those who will find them useful. If there is incorrect information in a particular file then please report the issue as per RepeaterBook.com's reporting system. I in no way represent or am tied to the website. I have ZERO Pecuniary/Financial interests and I only want to provide a useful tool to those who would like to have the database for offline archival use due to any number of circumstances, particularly with a readiness mindset. My instructions are written for those who have never dealt with these types of files and are not meant to insult anyone's intelligence and/or capabilities.
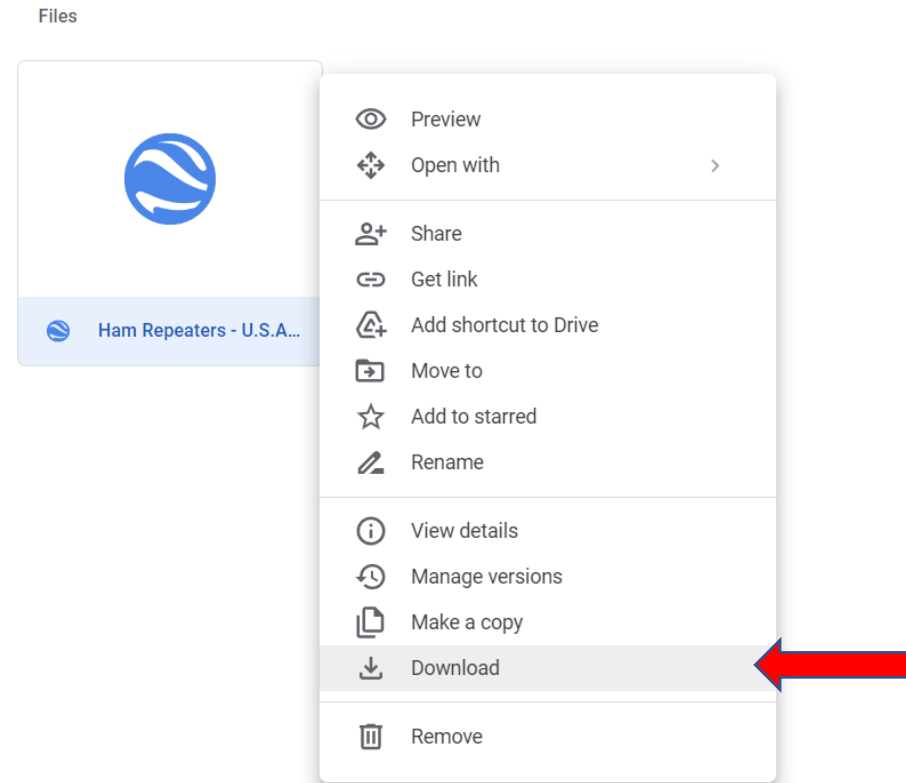
TLDR: THE EASY BUTTON

GO TO FOLDER > 0. United States All-In-One > Download to Local Folder - Ham Repeaters – U.S.A. (CAO {Current As Of} 17 Feb 2023)
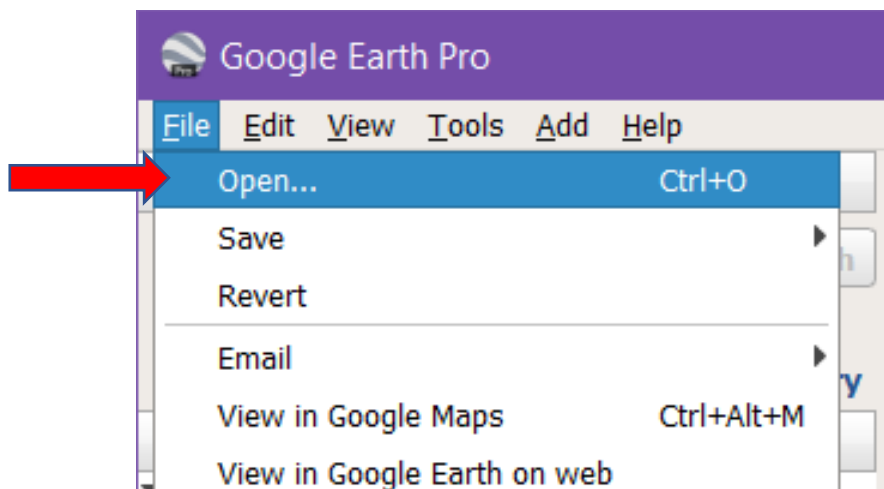
GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

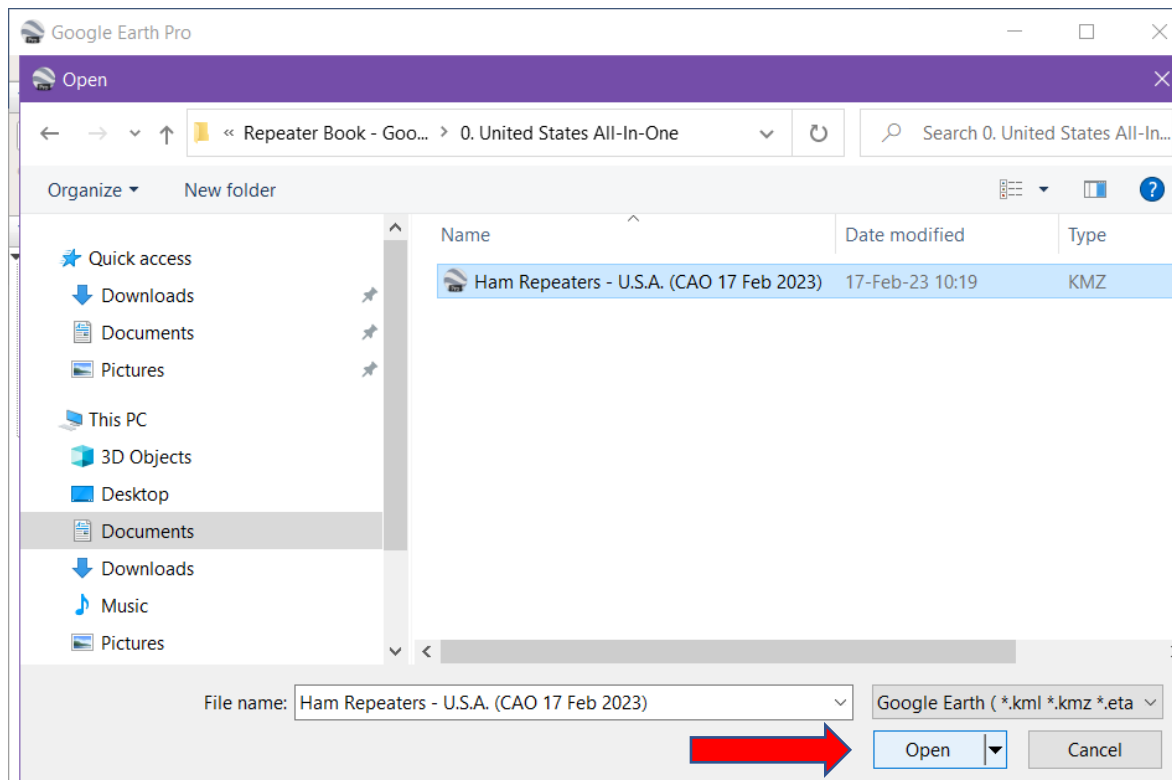My Drive > Google Earth Ham Repeaters (United States) > 0. Un

Files

| Preview |
| ⌖ Open with > |
| Share |
| Get link |
| Add shortcut to Drive |
| Move to |
| Add to starred |
| Rename |
| View details |
| Manage versions |
| Make a copy |
| Download |
| Remove |

Ham Repeaters - U.S.A...

Install/Open Google Earth > **File** > **Open** > **Downloaded File** > **Enjoy!**

NOTE: While the overall database is only 30MB, this is loading every Ham Repeater in the United States, all categories, types, etc. all at once. If you have a slow and/or older computer you may want to read further or try it and let it try to load (**BE PATIENT**). If your computer freezes up, use the Ctrl+Alt+Delete Task Manager > End Program Function to halt the loading and close out Google Earth. **IF THIS OCCURS… READ FURTHER!**

Google Earth Pro

| File | Edit | View | Tools | Add | Help |

| Open... | Ctrl+O |
| Save | ▶ |
| Revert |
| Email | ▶ |
| View in Google Maps | Ctrl+Alt+M |
| View in Google Earth on web |

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

FOLDER HIERARCHY LAYOUT

To maintain the socialization most Repeater Book users would be used to, I have arranged these folders broken out by the standard layout of the www.RepeaterBook.com webpages for each state. **State > All > Individualized Bands > Features (i.e., Echolink, AllStar, etc.) > Linked Systems > Emergency Services/Systems**

NOTE: The Emergency Service Repeater Systems CANWARN, Weather Nets, and Emergency Power do not download useable KML files for ANY State. After about the first ten states, I simply left these out.

MANUAL / CUSTOMIZED DOWNLOADING OF GOOGLE KML FILES FROM GOOGLE DRIVE LINK

I do recommend you download the entire set of folders locally so you may have them as an offline source, in the event of major communications outages, which is the primary reason for this effort. If you have a slow/older computer and/or you simply do not want or need the entire United States Repeater Database local on your computer then please follow these steps.

<u>Download All State Folders</u>:

Select All Folders by Pressing Ctrl+A

Mouse Over Highlight Folders and Right Click
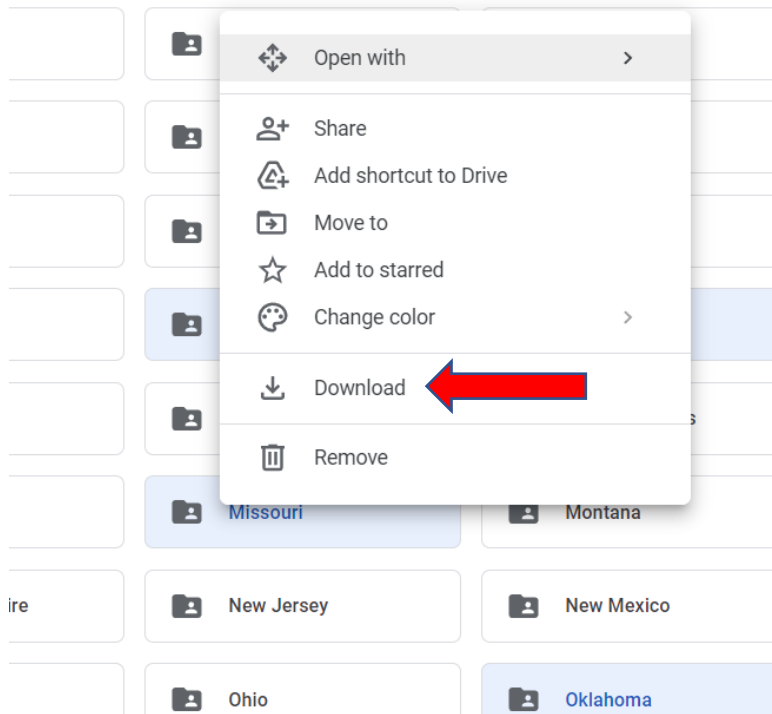
Download to Local Folder

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

<u>Download Individual States and/or Subfolders</u>

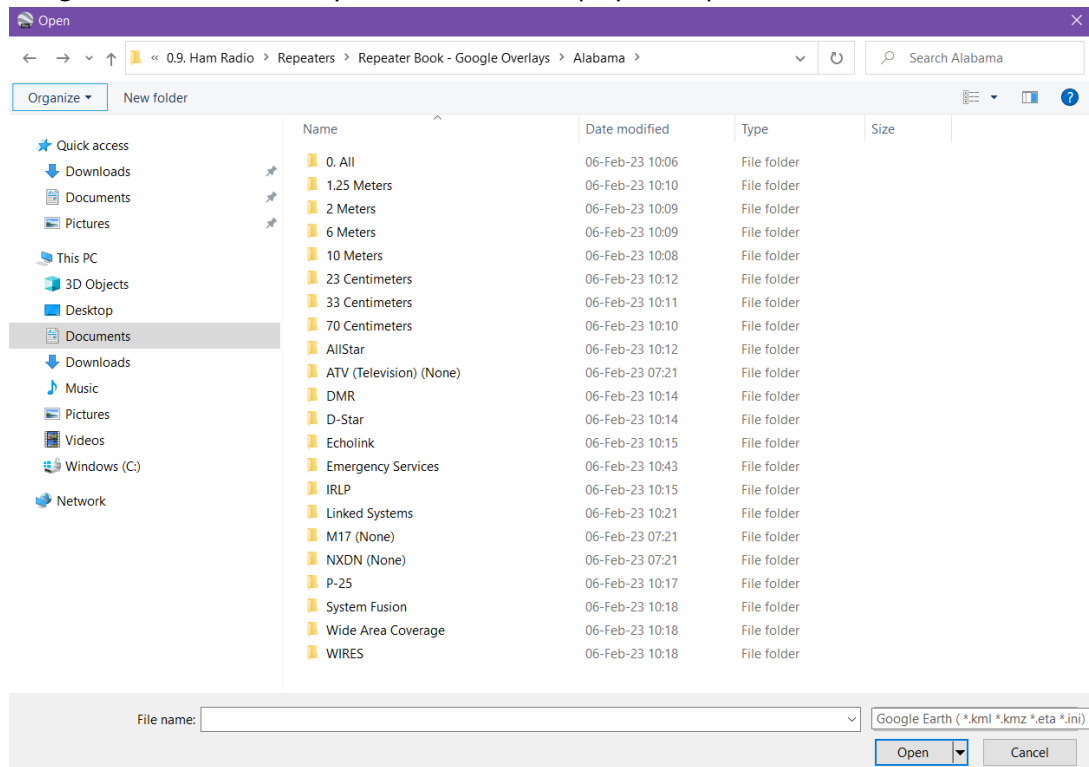Select Target Folders by Holding Down Ctrl

Right Click

Download

LOADING STATE KML FILES INTO GOOGLE EARTH

File > Open > Go INTO a State Folder > Type KML in the Search Box > Press Enter > All KML Files with Folder will be Displayed > Ctrl+A to Select ALL or Press Ctrl to Select Targeted Files > Press Enter.
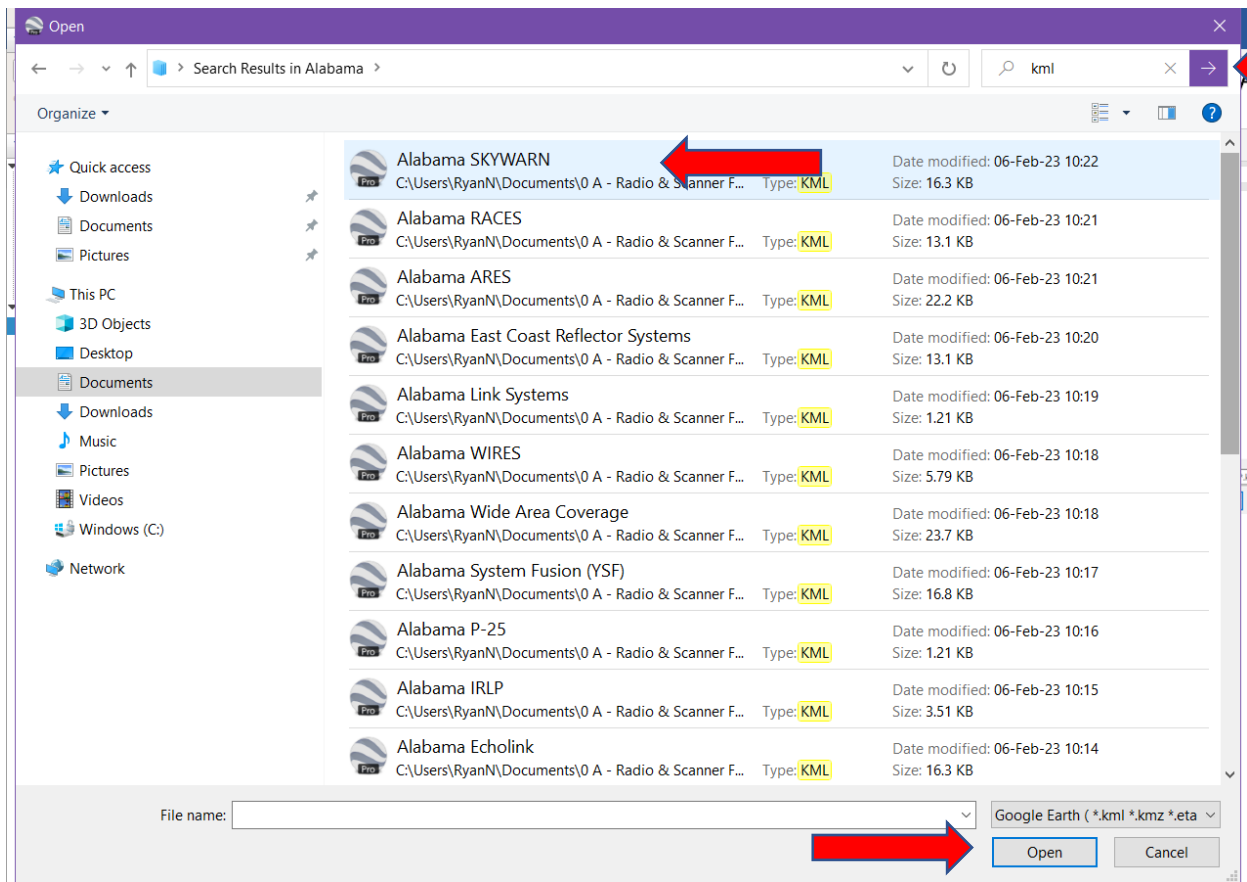
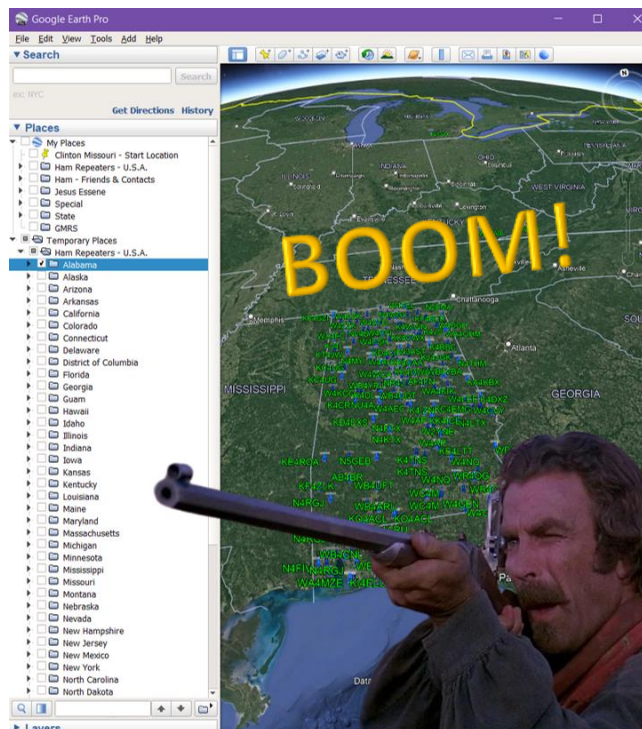# GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

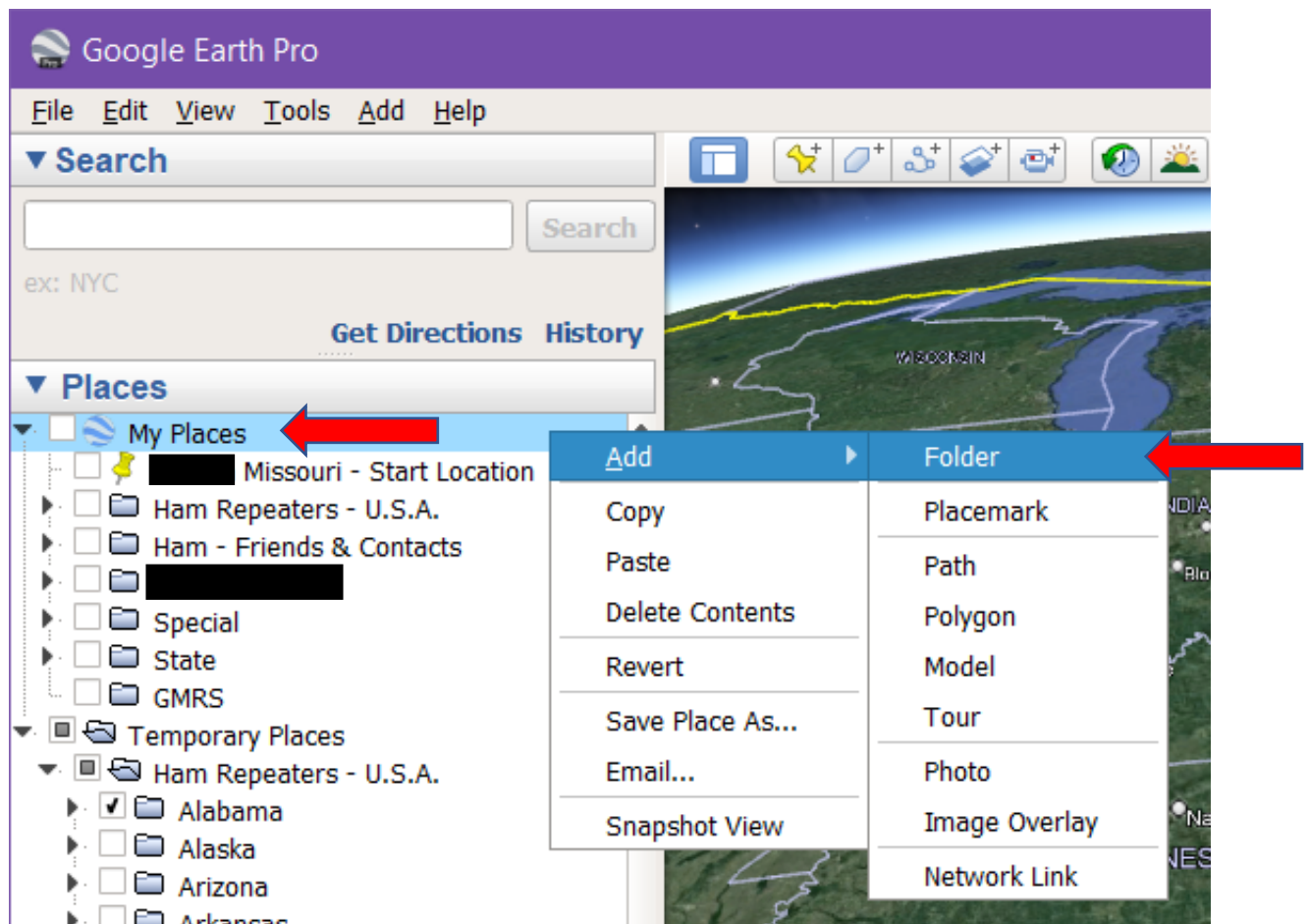Google Earth will start to Fly To the area and display the repeaters.

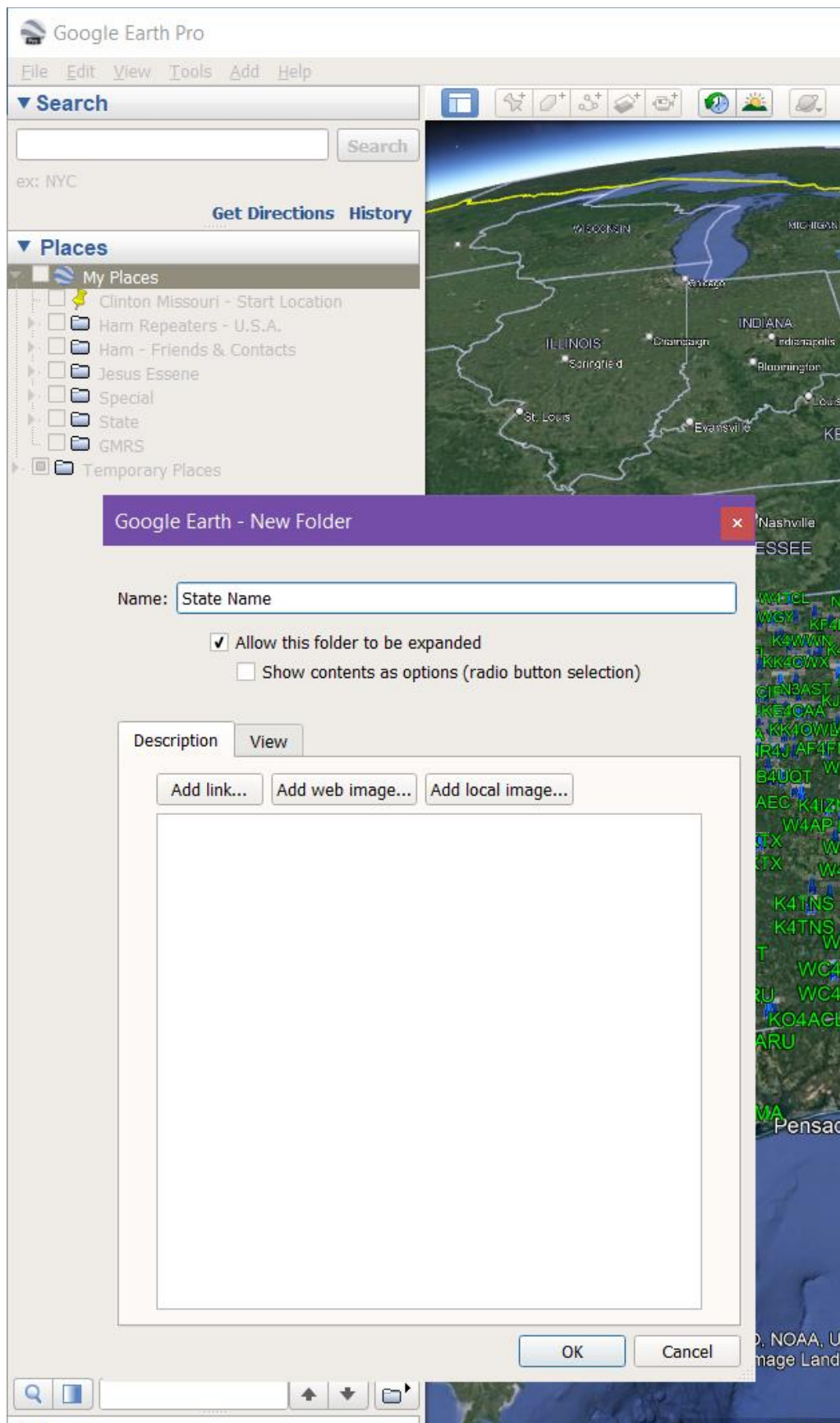# GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

So, you may have noticed all those neatly organized files and see a difference as to what you just loaded. Simply mouse over MyPlaces and select Add > Folder

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

From here you can use the same process to build out drill down subfolders by whatever categorization you desire.

ADDITIONAL TOOLS & TIPS

Useful Keyboard + Mouse Shortcuts

Ctrl + Mouse Wheel Scroll = Spin View Change Direction Orientation

Shift + Mouse Wheel Scroll = Change Elevation View Angle

U = Quick Return to Top View
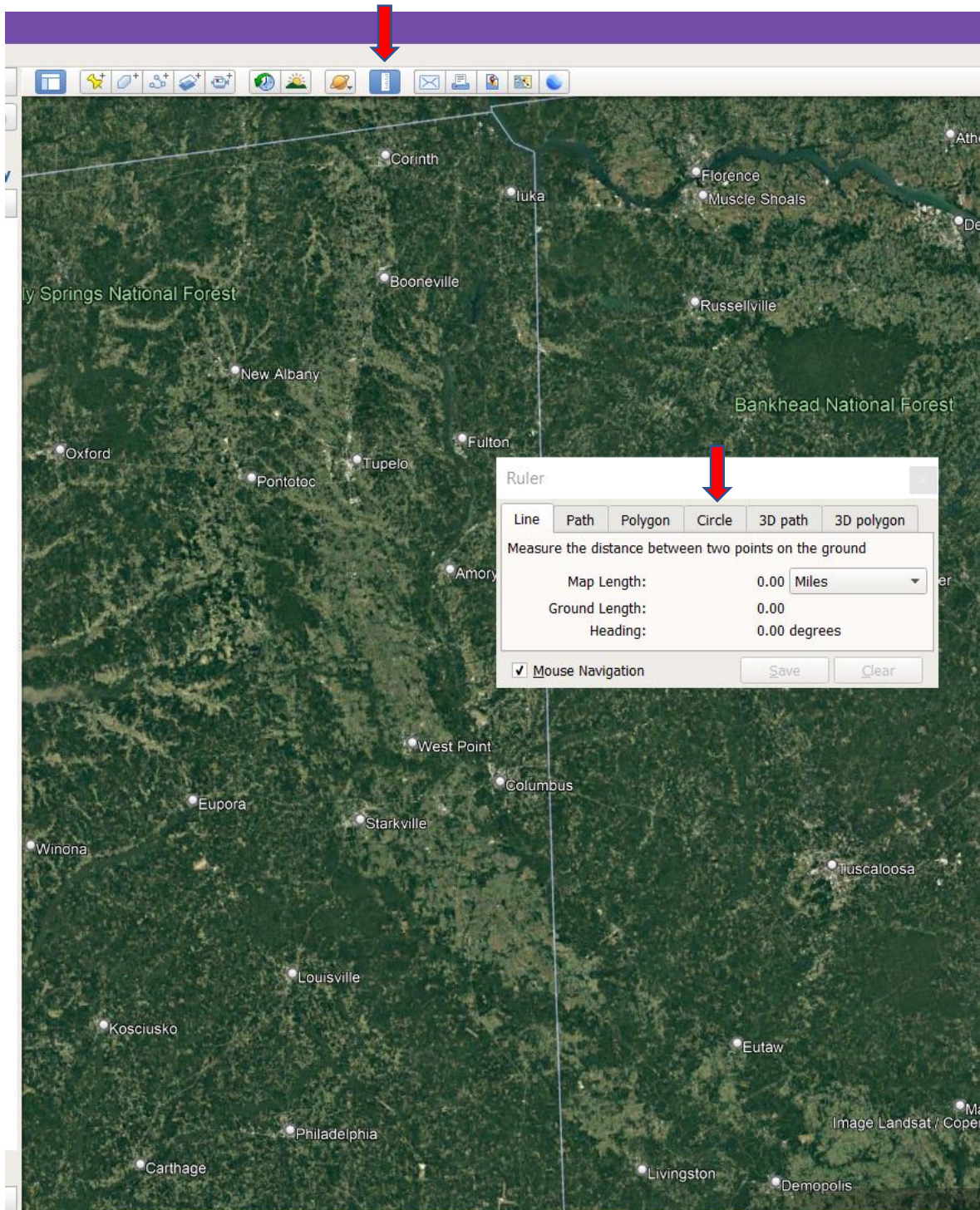
R = Quick Return to North Orientation

Create Tracks in Google Earth **(Hiking, Hunting, Camping)**

Create a Circle Overlay (Good for Effective Radiated Power, Transmit/Receive Limits, Evacuation Cordons, etc.)
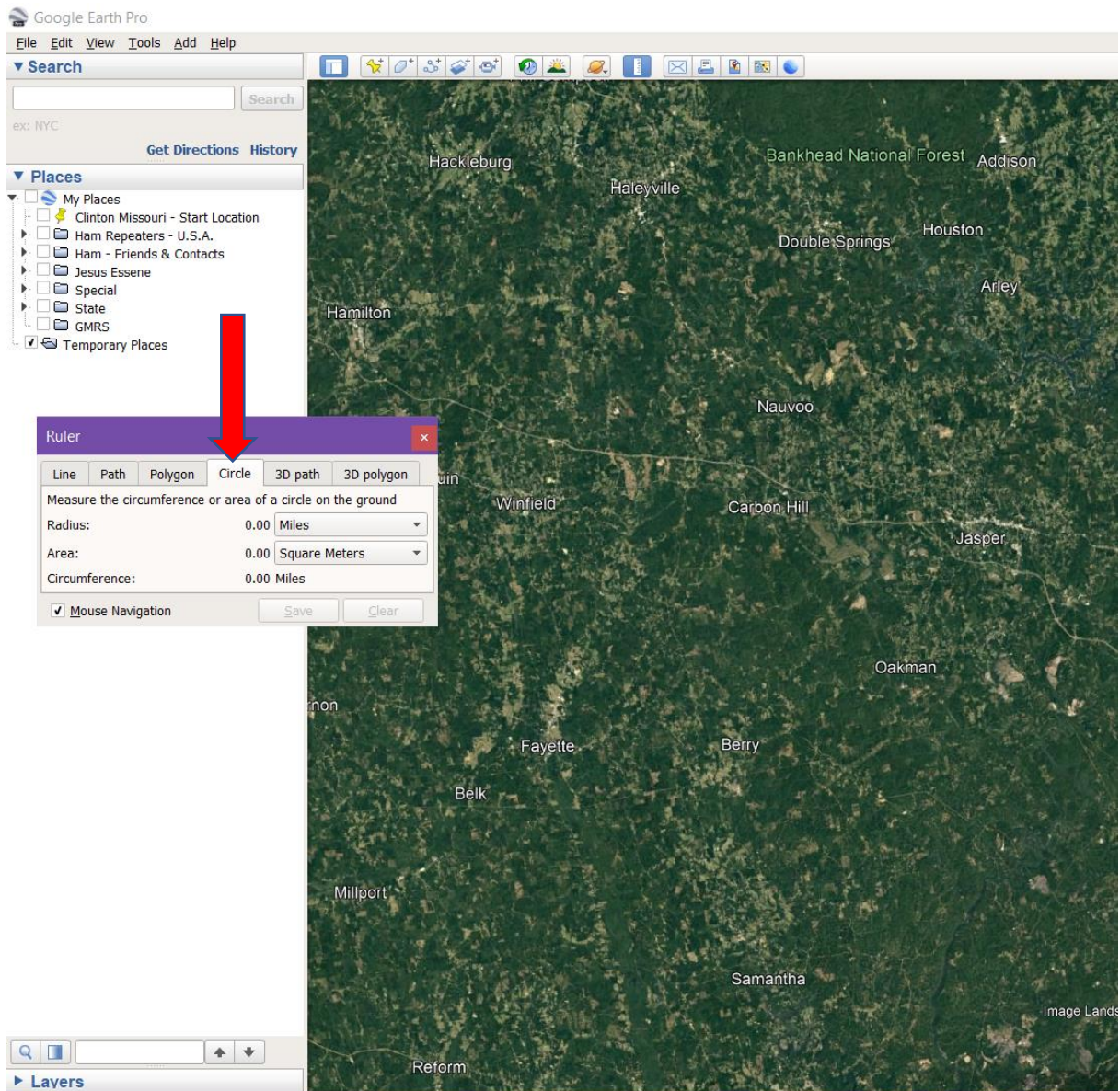
Select Show Ruler at Top Tool Ribbon

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

Ruler

Line	Path	Polygon	Circle	3D path	3D polygon

Measure the distance between two points on the ground

Map Length: 0.00   Miles ▼

Ground Length: 0.00

Heading: 0.00 degrees
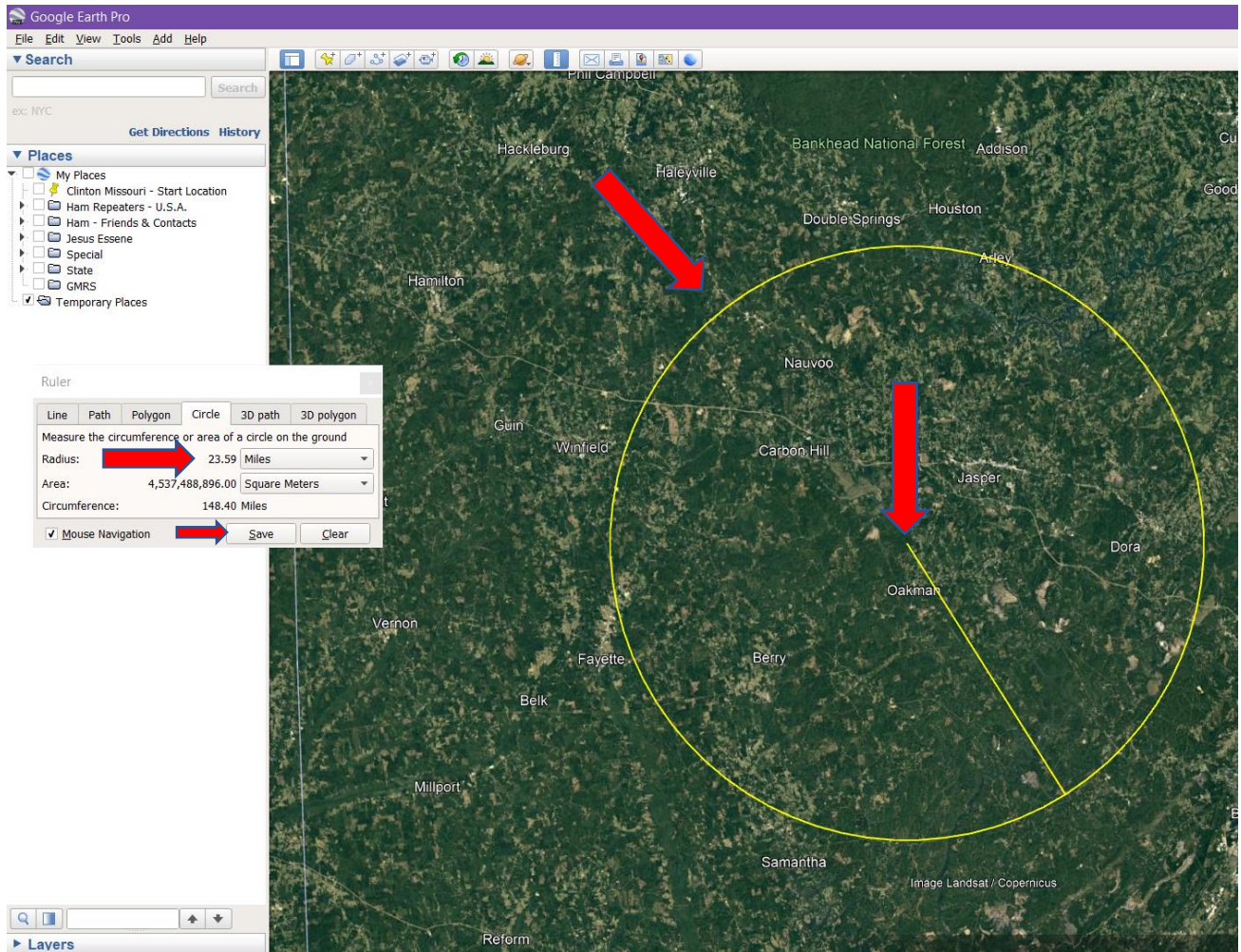
☑ Mouse Navigation   Save   Clear

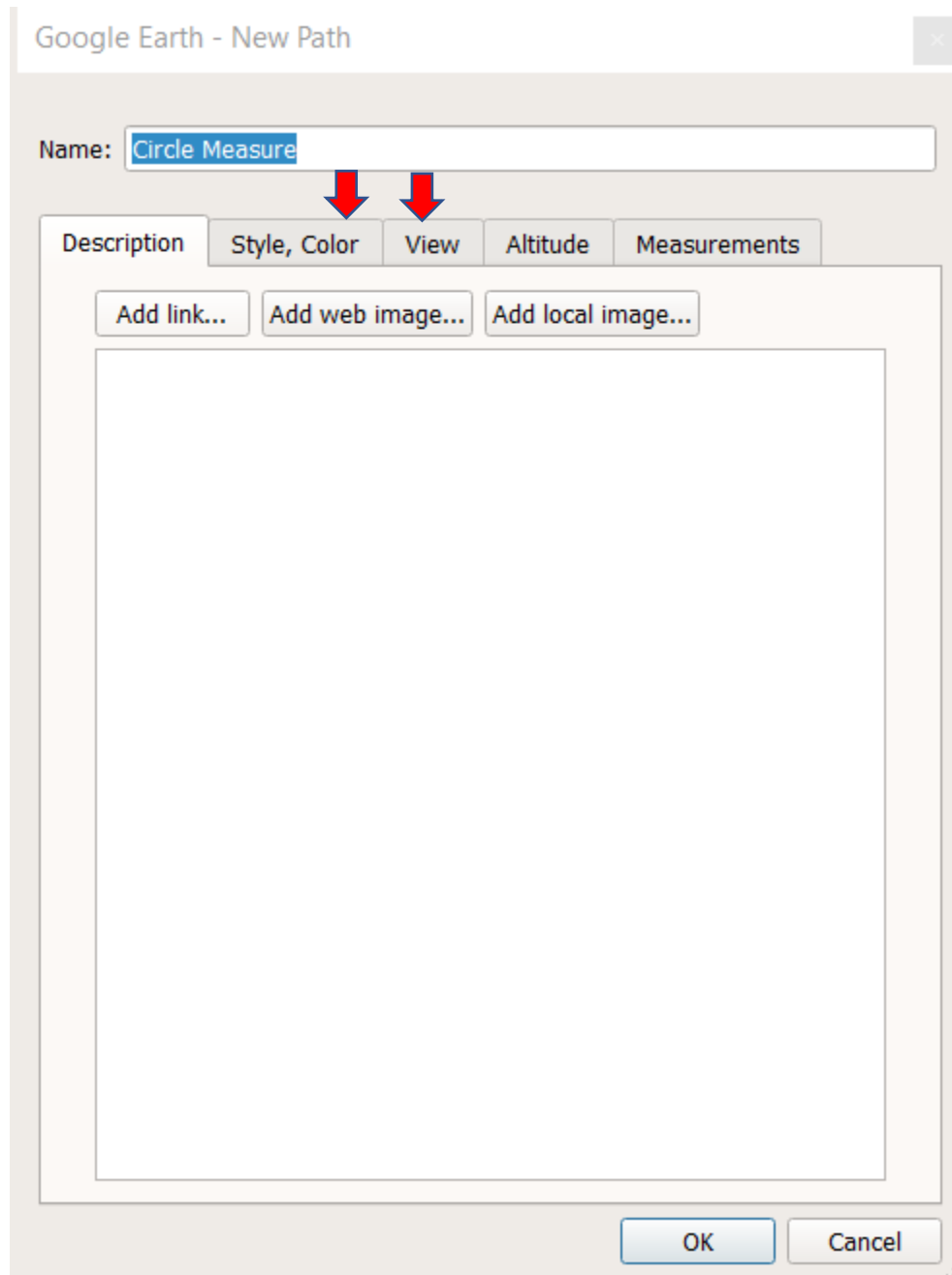# GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

Select Circle

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

Select a Datum Point (Center) on Map > Left Click and Drag Your Circle > **Monitor Your Distance on the Box** > Select Save
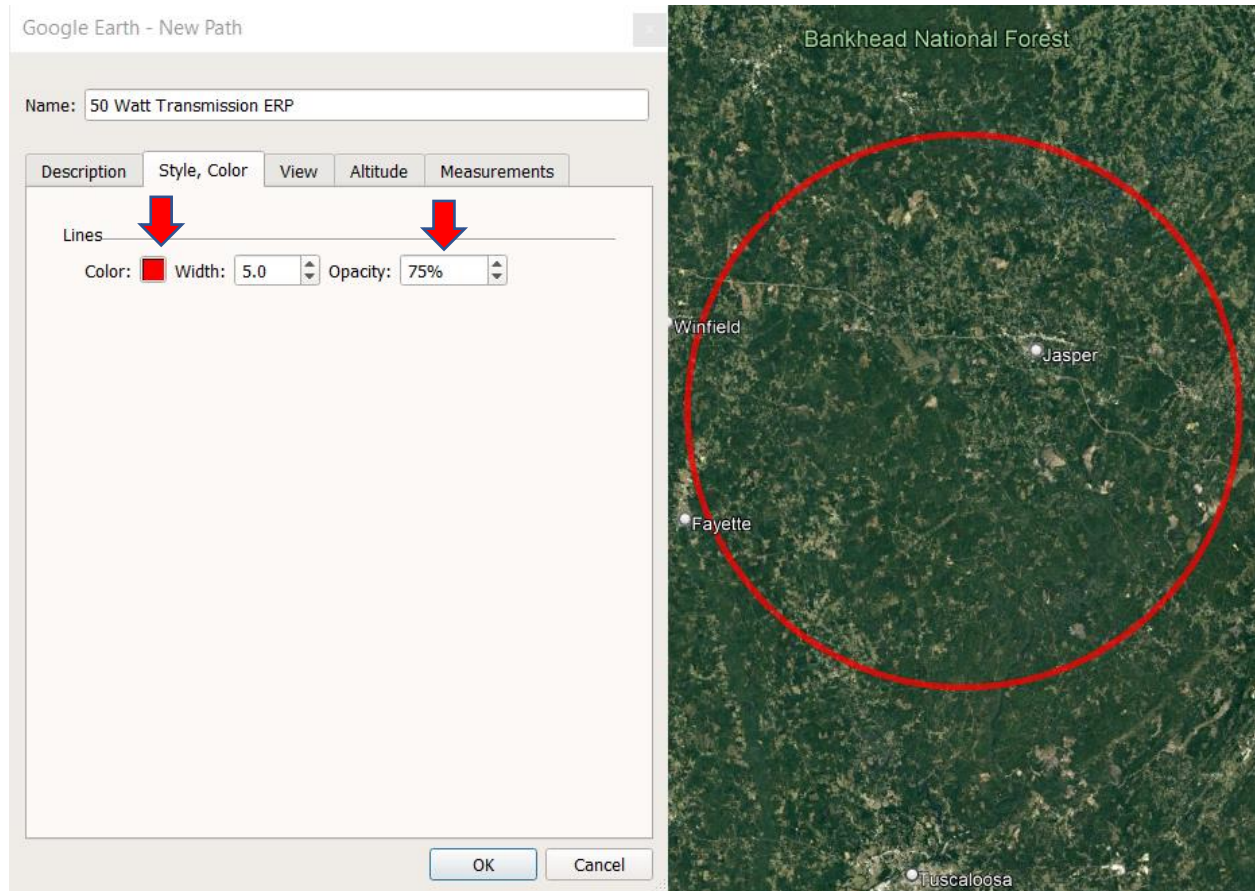
GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

Edit Name, Style, Color, Transparency, etc. > Then Organize Within Your "MyPlaces" Folder Drill/Dropdown Construct.

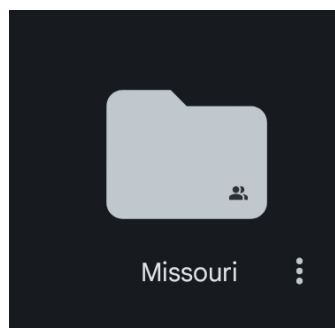# GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

DOWNLOAD GOOGLE EARTH KML FILES TO YOUR PHONE/DEVICE

Now that you have your mind wrapped around these useful files and want to know which device apps that use KML files? Simply type KML into your respective App Store search bar. To download these KML files to your phone/device? Follow these steps.
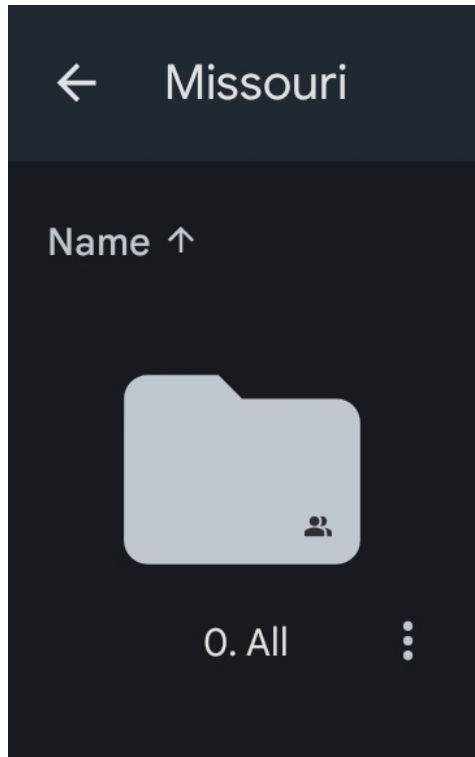
Go To the Google Drive Link:
https://drive.google.com/drive/folders/10Lvzkdtox8vG7iNkpQHSOIUfn8yUNV5b?usp=sharing
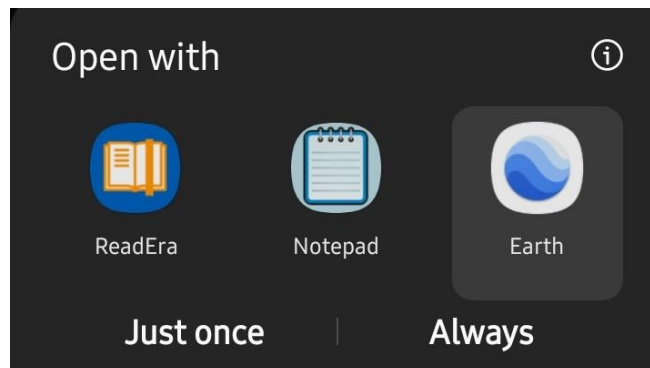
Select State Folder

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

Select Category Folder, Recommend You Select the "All" folder, unless you want only a targeted category.

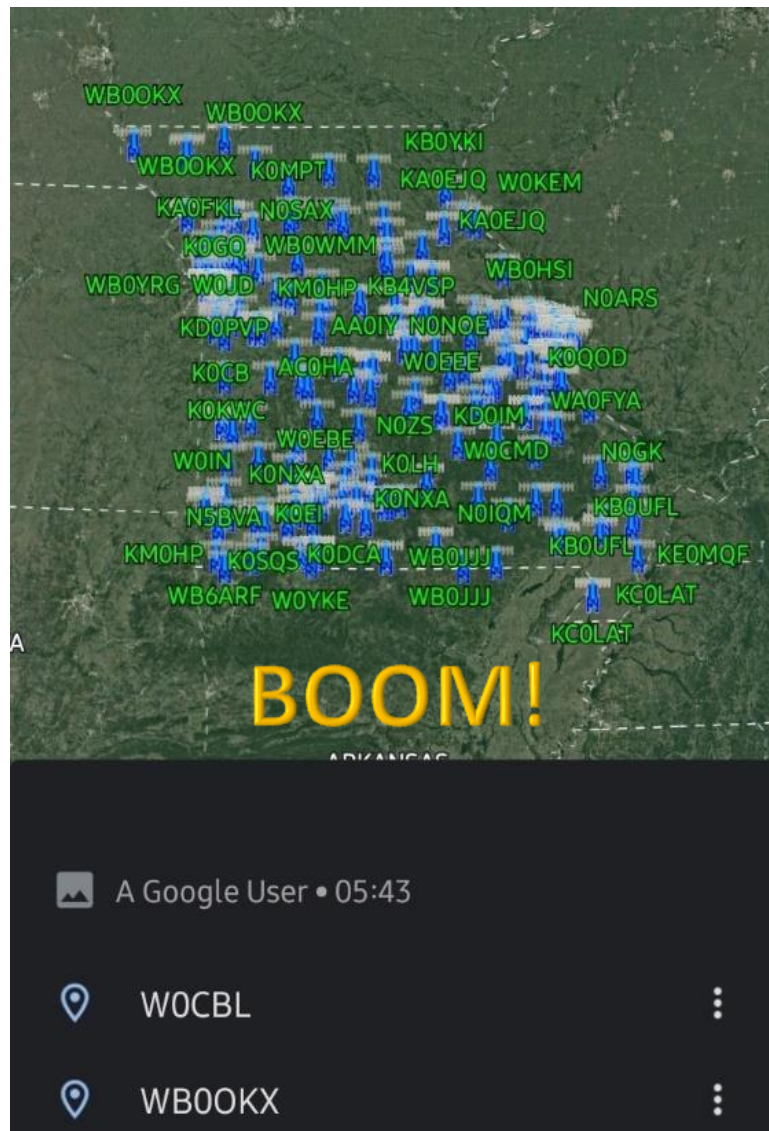Open with whichever application you want. In this example Google Earth. (Download/Install if Needed)
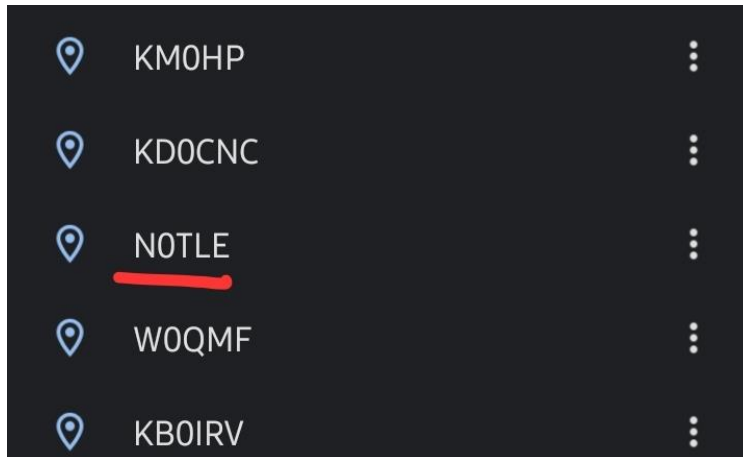
GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

Your selected KML file overlay will be displayed and ready to use. There will also be a scrollable list of Repeaters (Within the Category Download and Loaded), at the bottom. Use this list to go direct to your preferred Repeater Callsign(s).

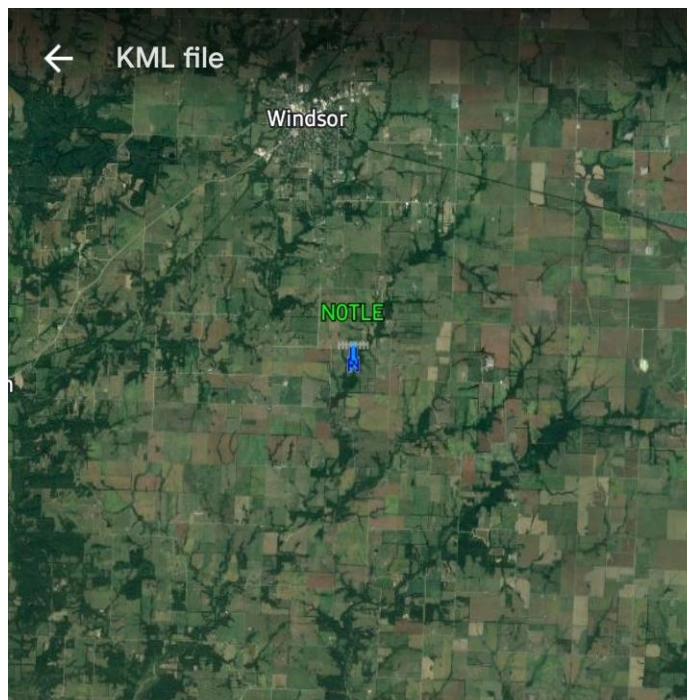# *GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)*

Scroll to Favorite Repeater(s)

View Repeater Details. Link will take you to the www.RepeaterBook.com details page.

Windsor
443.87500+ 107.2
On-air: Yes
Click for Details

NOTE: After you close your app, whenever you reopen Google Earth, the KML will be under your Projects listing, in the dropdown menu. Simply click on it to reload.

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

DOWNLOAD GOOGLE EARTH KML FILES DIRECTLY FROM REPEATER BOOK

Need to maintain updated files? Go to your State Page, via the North American Repeater Page Map or State List. Select your category. In this case we will choose All.

Mouse over the Map Results, the two options for Google Maps and Google Earth will drop down. **RIGHT CLICK AND OPEN LINK IN NEW TAB**. This will automatically download the KML files with a default file name to your downloads folder. **RENAME THE FILE SO YOU KNOW WHAT IT IS**.

GOOGLE EARTH HAM REPEATER OVERLAYS (UNITED STATES)

EMERGENCY PLANNERS, PREPPERS, AND THE CURIOUS

There are plenty of resources for all sorts of KML files, ranging from Solar Weather, Radio Blackout, Storm Tracks, and many others. Simply find the resource(s) and load them as above, or however the source indicated to load them. Many times, you can download and simply double click the file directly, which will open the app and load. Then it is just a matter of organizing your MyPlaces folders.

RATIONALE FOR THIS PROJECT (*Plan for the Worst, Hope for the Best*)

Spending 23+ years as Federal Law Enforcement/Military I used Google Earth extensively. Upon learning more about Ham Radio as I put my toe in the water, I could not find much along these lines as a "One-Stop-Shop" interface or as an Offline Download of an Entire Repeater Database. All I could find were regional batches with little to no useful information and many dead links on older websites. This kind of surprised me considering all the technological aspects of Ham Radio and the sheer brain power within the Global Ham Community. Perhaps, I simply did not find any hidden gems on the internets, but if I can track down an international threat actor, yet cannot find anything on this topic, then I choose to fill the knowledge gap. Honestly, I am surprised RepeaterBook.com does not offer this as comprehensive packages, but perhaps the demand is not there. I chose to do make this database for personal use, but I figured it might help others, particularly in the Emergency Services arena.

I basically wanted a solid Offline Archive for Ham Repeaters Locally. After receiving my License, this quickly grew to the entire country! Why Not? Without parsing out all the situationally dependent permutations of the actual usefulness/longevity factors of Ham Repeaters versus HF if/when/once the Apocalypse comes, what is most likely to be the case is these frequencies WILL BE PROGRAMMED in many of the Non-EMP Fried Ham Radios left to the poor souls who have survived. It can at least be used as the backbone frame-work to reestablish continental/global communications without having to completely reinvent the wheel, burn limited power linking/testing, and reprogramming/deconflicting spectrums, so on and so forth.

The other really cool day-to-day hobbyist aspect for the use of KML files over a wide range of programs and GPS applications. Are you an outdoor enthusiast? Hunter? Hiker? Etc. Well you can load these KML files into many GPS Apps and make use of them to plan for coverage. Not all Hams, especially Green Horns like me have HF equipment yet, nor want to pay for all that jazz, right out the gate. I got lucky with my beautiful wife really pushing me towards all things Ham Radio, but not everyone's partner is chomping at the bit to appreciate that romantic background static.

Hopefully, this has been helpful to all who appreciate the utility of this very versatile geospatial mapping tool and will be able to use it to broaden their Ham Toolbox and Knowledge Base. Thank you all for your time and consideration, and hopefully someday, somewhere, we will meet on the airwaves or in person.

Till Then 73's! You Are More Important Than You Know!

For the God-Fearing Patriots Out There... STAND TALL o7

They Stood Tall